## Claims

1. A'compound according to Formula I:

wherein, W is a nitrogen atom and Y is void or, W is a carbon atom and Y=H;  $R^1$  to  $R^7$  may be the same or different and are independently selected from hydrogen or straight, branched or cyclic  $C_{1-6}$  alkyl;

R<sup>8</sup> is a substituted heterocyclic group or a substituted aromatic group

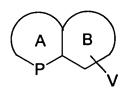
Ar is an aromatic or heteroaromatic ring each optionally substituted at single or multiple, non-linking positions with electron-donating or withdrawing groups;

n and n' are independently, 0-2;

X is a group of the formula:



or



wherein, Ring A is an optionally substituted, saturated or unsaturated 5 or 6-membered ring, and P is an optionally substituted carbon atom, an optionally substituted nitrogen atom, sulfur or oxygen atom;

wherein Ring B is an optionally substituted 5 to 7-membered ring;

wherein Ring A or Ring B are bound to group W from any position through group

V;

wherein V is a chemical bond or V is a  $(CH_2)_n$  group, (where n = 0-2) or V is a C=O group; and

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wherein Z is selected from the group consisting of: a hydrogen atom; an optionally substituted  $C_{1-6}$  alkyl group; a  $C_{0-6}$  alkyl group substituted with an optionally substituted aromatic or heterocyclic group; an optionally substituted  $C_{0-6}$  alkylamino or  $C_{3-7}$  cycloalkylamino group; and an optionally substituted carbonyl group or sulfonyl; and wherein further comprising any pharmaceutically acceptable acid addition salts thereof and any stereoisomeric forms and mixtures of stereoisomeric forms thereof.

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- 2. The compound of claim 1, wherein said optionally substituted 5 or 6-membered Ring A is selected from the group consisting of: benzene; pyridine; pyrimidine; pyrazine; priazine; piperidine; piperazine; imidazole; pyrazole; triazole; oxazole; and thiazole.
- 3. The compound of claim 1, wherein said optionally substituted Ring B is selected from the group consisting of: benzene; 5 to 7-membered cycloalkyl ring; furan; dihydrofuran; tetrahydrofuran; thiophene, dihydrothiophene; tetrahydrothiophene (thiolane); pyran; dihydropyran; tetrahydropyran; thiapyran; dihydrothiapyran; tetrahydrothiapyran (pentamethylene sulfide); oxepine; and thiepin.
- 4. The compound of claim 3, wherein said Ring B comprises a 5 to 7–membered cycloalkyl ring selected from the group consisting of: cyclopentyl; cyclohexyl; cyclohexpl; cyclohexenyl; and cycloheptenyl.
- 5. The compound of claim 3, wherein said Ring B comprises a saturated heterocycloalkane.

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6. The compound of claim 1, wherein said Ring A and said Ring B are each 6-membered rings, independently selected from the group consisting of: dihydronaphthalene; tetrahydronaphthalene; dihydroquinoline and tetrahydroquinoline.

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7. The compound of claim 1, wherein said Ring A or said Ring B is independently substituted with a substituent selected from the group consisting of:



halogen; nitro; cyano; carboxylic acid; an optionally substituted alkyl, alkenyl or cycloalkyl group; an optionally substituted hydroxyl group; an optionally substituted thiol group; an optionally substituted amino or acyl group; an optionally substituted carboxylate, carboxamide or sulfonamide group; and an optionally substituted aromatic or heterocyclic group.

- 8. The compound of claim 7, wherein said Ring A or said Ring B is substituted with a halogen, selected from the group consisting of: fluorine; chlorine; bromine; and iodine.
- 9. The compound of claim 7, wherein said Ring A or said Ring B is substituted with an optionally substituted  $C_{1-10}$  alkyl group, selected from the group consisting of: methyl; ethyl; and propyl.
- 10. The compound of claim 7, wherein said Ring A or said Ring B is substituted with a C<sub>2-10</sub> alkenyl group, selected from the group consisting of: allyl; crotyl; 2-pentenyl; and 3-hexenyl.
- 11. The compound of claim 7, wherein said Ring A or said Ring B is substituted with a C<sub>3-10</sub>cycloalkyl group, selected from the group consisting of: cyclopropyl; cyclobutyl; cyclopentyl; cyclohexyl; and cycloheptyl.
- 12. The compound of any one of claims 1-11, wherein said optional substituent in said Ring A or said Ring B is independently selected from the group consisting of: an optionally substituted aralkyl or heteroalkyl, wherein said heteroalkyl comprises a 5 or 6 membered ring comprising 1-4 heteroatoms.



13. The compound of claim 12, wherein said optionally substituted aralkyl or heteroalkyl is selected from the group consisting of: phenylC<sub>1-4</sub>alkyl; phenylmethyl (benzyl); phenethyl; pyridinylmethy; and pyridinylethyl.

- 14. The compound of claim 7, wherein said substituent is independently selected from the group consisting of: an optionally substituted hydroxyl; optionally substituted thiol; an optionally substituted alkyl; an optionally substituted cycloalkyl; and an optionally substituted aralkyl.
- 15. The compound of claim 14, wherein said optionally substituted alkyl is selected from the group consisting of: methyl; ethyl; propyl; isopropyl; butyl; isobutyl; sec-butyl; tert-butyl; and pentyl; wherein said optionally substituted cycloalkyl is selected from the group consisting of: cyclopropyl; cyclobutyl; cyclopentyl; cyclohexyl; and cycloheptyl; and wherein said optionally substituted aralkyl is selected from the group consisting of: benzyl and phenethyl.\
- 16. The compound of claim 15, wherein said Ring A or said Ring B comprises two adjacent hydroxyl or thiol substituents comprising heteroatoms, said heteroatoms are optionally connected through an alkyl group selected from the group consisting of:  $O(CH_2)_nO$ ; and  $S(CH_2)_nS$ ; and wherein n=1-5.
- 17. The compound of claim 16, wherein said connecting alkyl group is selected from the group consisting of: methylenedioxy; ethylenedioxy; and an oxide of thio-ether group comprising a sulfoxide or sulfone.
- 18. The compound of claim 14, wherein said optionally substituted hydroxyl is selected from the group consisting of: an optionally substituted C<sub>2-4</sub>alkanoyl; C<sub>1-4</sub> alkylsufonyl; and an optionally substituted aromatic or heterocyclic carbonyl group.
- 19. The compound of claim 18, wherein said substituted C<sub>2-4</sub>alkanoyl is selected from the group consisting of: acetyl; propionyl; butytyl; and isobutyryl; wherein said C<sub>1-4</sub> alkylsufonyl is selected from the group consisting of: methanesulfonyl and ethanesulfonyl; wherein said optionally substituted aromatic is behzoyl; and wherein said heterocyclic carbonyl group is pyridinecarbonyl.

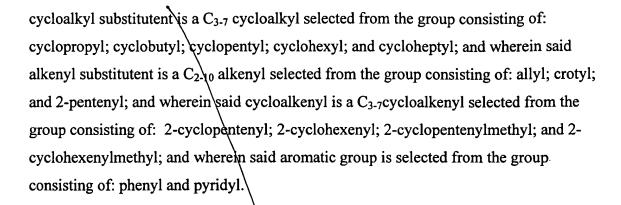
- 20. The compound of claim 7, wherein said Ring A or said Ring B or both comprise one or more optionally substituted amino groups; wherein a first substituent of a first said substituted amino group binds to a second substitutent of a second said substituted amino group forming thereby a cyclic amino group.
- 21. The compound of claim 20, wherein said cyclic amino group is a 5- to 6-membered cyclic amino group selected from the group consisting of: tetrahydropyrrole; piperazine; piperidine; pyrrolidine; morpholine; thiomorpholine; pyrrole; and imidazole.
- The compound of claim 20 or 21, wherein said cyclic amino group is substituted with one or more substituents independently selected from the group consisting of: halogen; nitro; cyano; hydroxy group; thiol group; amino group; carboxyl group; an optionally halogenated  $C_{1-4}$  alkyl; an optionally halogenated  $C_{1-4}$  alkoxy;  $C_{2-4}$  alkanoyl; and  $C_{1-4}$  alkylsulfonyl.
- 23. The compound of claim 22, wherein said halogen is selected from the group consisting of: fluorine; chlorine; bromine; and iodine; wherein said optionally halogenated  $C_{1-4}$  alkyl is selected from the group consisting of: trifluoromethyl; methyl; and ethyl; wherein said optionally halogenated  $C_{1-4}$  alkoxy selected from the group consisting of: methoxy; ethoxy; trifluoromethoxy; and trifluoroethoxy; wherein said  $C_{2-4}$  alkanoyl is acetyl or propionyl; and wherein said  $C_{1-4}$  alkylsulfonyl is selected from the group consisting of: methanesulfonyl and ethanesulfonyl.
- 24. The compound of claim 22 or 23, wherein said cyclic amino group comprises 1 to 3 substituents.
- 25. The compound of claim 7, wherein said amino group comprises one or two substituents forming a secondary or tertiary amine, respectively.
- 26. The compound of claim 25, wherein said amino group is substituted with one or two said substituents selected from the group consisting of an optionally

substituted alkyl group; an optionally substituted alkenyl group; and an optionally substituted cycloalkyl group.

- 27. The compound of claim 26, wherein said substituents i selected from the group consisting of: C<sub>1-6</sub>alkyl; alkenyl; and cycloalkyl.
- 28. The compound of claim 26, wherein said optionally substituted alkyl group is a C<sub>1-10</sub>alkyl selected from the group consisting of: methyl; ethyl; and propyl; wherein said optionally substituted alkenyl group is selected from the group consisting of: allyl; crotyl; 2-pentenyl; and 3-hexenyl; wherein said optionally substituted cycloalkyl group is selected from the group consisting of: cyclopropyl; cyclobutyl; cyclopentyl; cyclohexyl; and cycloheptyl.
- 29. The compound of claim 26, wherein said amine group is optionally substituted with an aromatic or heterocyclic group or an aralkyl or heteroalkyl group.
- 30. The compound of claim 29, wherein said amine group is substituted with a substituent group selected from the group consisting of: phenyl; pyridine; phenylmethyl (benzyl); phenethyl; pyridinylmethyl; pyridinylethyl; and phenylC<sub>1-4</sub>alkyl.
- 31. The compound of claim 29, wherein said heterocyclic group is a 5- or 6-membered ring comprising 1 to 4 heteroatoms.
- 32. The compound of claim 25, wherein said substituent on said amino group is substituted with one or more substituents independently selected from the group consisting of: halogen; nitro; cyano; hydroxy group; thiol group; amino group; carboxyl group; an optionally halogenated  $C_{1-4}$  alkyl; an optionally halogenated  $C_{1-4}$  alkylsulfonyl.
- 33. The compound of claim 32, wherein said halogen is selected from the group consisting of: fluorine; chlorine; bromine; and iodine; wherein said optionally

halogenated  $C_{1-4}$  alkyl is selected from the group consisting of: trifluoromethyl; methyl; and ethyl; wherein said optionally halogenated  $C_{1-4}$  alkoxy selected from the group consisting of: methoxy; ethoxy; trifluoromethoxy; and trifluoroethoxy; wherein said  $C_{2-4}$  alkanoyl is acetyl or propionyl; and wherein said  $C_{1-4}$  alkylsulfonyl is selected from the group consisting of: methanesulfonyl and ethanesulfonyl.

- 34. The compound of claim 25, wherein said amino group is substituted with an optionally substituted  $C_2$  alkanoyl; or a  $C_{1-4}$ alkylsulfonyl; or a carbonyl or sulfonyl substituted aromatic or heterocyclic ring.
- 35. The compound of claim 34, wherein said C<sub>2-4</sub> alkanoyl is selected from the group consisting of: acetyl; propionyl; butyryl; and isobutyryl; wherein said C<sub>1-4</sub> alkylsulfonyl is selected from the group consisting of: methanesulfonyl and ethanesulfonyl; and wherein said carbonyl or sulfonyl substituted aromatic or heterocyclic ring is selected from the group consisting of: benzenesulfonyl; benzoyl; pyridinesulfonyl; and pyridinecarbonyl.
- 36. The compound of claim 34, wherein said heterocyclic ring is a 5- or 6-membered ring comprising 1 to 4 heteroatoms.
- 37. The compound of claim 7, wherein said Ring A or said Ring B is optionally substituted with said acyl group substitutent that is optionally substituted with a substitutent selected from the group consisting of: a carbonyl group or a sulfonyl group bound to hydrogen; an optionally substituted alkyl; an optionally substituted cycloalkyl; an optionally substituted alkenyl; an optionally substituted cycloalkenyl; and an optionally substituted 5- to 6-membered monocyclic aromatic group.
- 38. The compound of claim 37, wherein said acyl group is optionally substituted with said alkyl substitutent which is a  $C_{1-10}$  alkyl selected from the group consisting of: methyl; ethyl; propyl; isopropyl; butyl; isobutyl; sec-butyl; tert-butyl; pentyl; isopentyl; neopentyl; hexyl; heptyl; octyl; nonyl; and decyl; and wherein said



- 39. The compound of claim 7, wherein said Ring A or said Ring B is optionally substituted with said carboxylate group substitutent that is optionally substituted with a substitutent selected from the group consisting of: an optionally substituted alkyl; an optionally substituted alkenyl; an optionally substituted cycloalkenyl; and an optionally substituted aryl.
- 40. The compound of claim 39, wherein said alkyl substitutent is a  $C_{1-10}$  alkyl selected from the group consisting of: methyl; ethyl; propyl; isopropyl; butyl; isobutyl; sec-butyl; tert-butyl; pentyl; isopentyl; neopentyl; hexyl; heptyl; octyl; nonyl; and decyl; and wherein said cycloalkyl substituent is a  $C_{3-7}$  cycloalkyl selected from the group consisting of: cyclopropyl; cyclobutyl; cyclopentyl; cyclohexyl; and cycloheptyl; and wherein said alkenyl substituent is a  $C_{2-10}$  alkenyl selected from the group consisting of: allyl; crotyl; 2-pentenyl; and 3-hexenyl; and wherein said cycloalkenyl substituent is a  $C_{3-7}$  cycloalkenyl selected from the group consisting of: 2-cyclohexenylmethyl; and wherein said aryl substituent is a  $C_{1-4}$  aryl selected from the group consisting of: phenyl; naphthyl; benzyl; phenethyl; methoxymethyl; and methoxyethyl.
- 41. The compound of claim 7, wherein Ring A or said Ring B is optionally substituted with a substituent comprising said carboxamide or said sulfonamide group, wherein one or both amino substituents of said carboxamide or said sulfonamide groups is independently optionally substituted in one or more amide groups with one or more substitutents independently selected from the group consisting of: halogen; nitro; cyano; hydroxy group; thiol group; amino group; carboxyl group; an optionally

halogenated  $C_{1-4}$  alkyl; an optionally halogenated  $C_{1-4}$  alkoxy;  $C_{2-4}$  alkanoyl; and  $C_{1-4}$  alkylsulfonyl.

- 42. The compound of claim 41, wherein said halogen is selected from the group consisting of: fluorine; chlorine; bromine; and iodine; wherein said optionally halogenated  $C_{1-4}$  alkyl is selected from the group consisting of: trifluoromethyl; methyl; and ethyl; wherein said optionally halogenated  $C_{1-4}$  alkoxy selected from the group consisting of: methoxy; ethoxy; trifluoromethoxy; and trifluoroethoxy; wherein said  $C_{2-4}$  alkanoyl is acetyl or propionyl; and wherein said  $C_{1-4}$  alkylsulfonyl is selected from the group consisting of: methanesulfonyl and ethanesulfonyl.
- 43. The compound of claim 7, wherein said Ring A or said Ring B is optionally substituted with a substitutent comprising an aromatic or heterocyclic group selected from the group consisting of: phenyl; naphthyl; and a 5- or 6-membered heterocyclic ring comprising 1 to 4 heteroatoms
- 44. The compound of claim 43, wherein said aromatic or heterocyclic group is optionally substituted with a substitutent selected from the group consisting of: halogen; nitro; cyano; carboxylic acid; an optionally substituted alkyl, alkenyl or cycloalkyl group; an optionally substituted thiol group; an optionally substituted amino or acyl group; an optionally substituted carboxylate, carboxamide or sulfonamide group; and an optionally substituted aromatic or heterocyclic group.
- 45. The compound of claim 7, wherein the number of substituents on said Ring A and said B comprises 1 to 4 substitutents.
- 46. The compound of claim 7, wherein the number of substituents on said Ring A and said B comprises 1 to 2 substitutents.

- 47. The compound of claim 7, wherein said optionally substituted groups are themselves optionally substituted with one or more further substituents independently selected from the group consisting of: halogen; nitro; cyano; carboxylic acid; an optionally substituted alkyl, alkenyl or cycloalkyl group; an optionally substituted hydroxyl group; an optionally substituted thiol group; an optionally substituted amino or acyl group; an optionally substituted carboxylate, carboxamide or sulfonamide group; and an optionally substituted aromatic or heterocyclic group.
- 48. The compound of claim 7, wherein said optionally substituted groups are themselves optionally substituted with one or more further substituents independently selected from the group consisting of: nitro, cyano, hydroxy group, thiol group, amino group, carboxyl group, carboxylate group, sulfonate group, sulfonamide group, carboxamide group, an optionally halogenated C<sub>1-4</sub> alkoxy, C<sub>2-4</sub> alkanoyl or aroyl, a C<sub>1-4</sub> alkylsulfonyl, an optionally substituted aryl or heterocyclic group.
- 49. The compound of claim 48, wherein the number of said further substituents on said groups is 1 to 3.
- 50. The compound of claim 47, claim 48, or claim 49, wherein said halogen is selected from the group consisting of: fluorine; chlorine; bromine; and iodine; wherein said optionally halogenated C<sub>1-4</sub> alkyl is selected from the group consisting of: trifluoromethyl; methyl; and ethyl; wherein said optionally halogenated C<sub>1-4</sub> alkoxy selected from the group consisting of: methoxy; ethoxy; trifluoromethoxy; and trifluoroethoxy; wherein said C<sub>2-4</sub> alkanoyl is acetyl or propionyl, and wherein said C<sub>1-4</sub> alkylsulfonyl is selected from the group consisting of: methanesulfonyl and ethanesulfonyl.
- 51. The compound of claim 1, wherein Z is an optionally substituted C<sub>1-6</sub>alkyl group, wherein said C<sub>1-6</sub>alkyl group is substituted with one or more further substituents independently selected from the group consisting of: halogen; nitro; cyano; carboxylic acid; an optionally substituted alkyl, alkenyl or cycloalkyl group; an optionally

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Į.į ļ≓ substituted hydroxyl group; an optionally substituted thiol group; an optionally substituted amino or acyl group; an optionally substituted carboxylate, carboxamide or sulfonamide group; and an optionally substituted aromatic or heterocyclic group.

- The compound of claim 51, wherein said optionally substituted C<sub>1-6</sub>alkyl 52. group is optionally substituted with one or more further substituents independently selected from the group consisting of: nitro, cyano, hydroxy group, thiol group, amino group, carboxyl group, carboxylate group, sulfonate group, sulfonamide group, carboxamide group, an optionally halogenated C<sub>1-4</sub> alkoxy, C<sub>2-4</sub> alkanoyl or aroyl, a C<sub>1-4</sub> alkylsulfonyl, an optionally substituted aryl or heterocyclic group.
- The compound of claim\52, wherein the number of said further 53. substituents on said  $C_{1-6}$ alkyl group is 1\to 3.
- 54. The compound of claim 51, claim 52, or claim 53, wherein said halogen is selected from the group consisting of: fluorine; chlorine; bromine; and iodine; wherein said optionally halogenated C<sub>1-4</sub> alkyl is selected from the group consisting of: trifluoromethyl; methyl; and ethyl; wherein said optionally halogenated C<sub>1-4</sub> alkoxy selected from the group consisting of: methoxy; ethoxy; trifluoromethoxy; and trifluoroethoxy; wherein said C<sub>2-4</sub> alkanoyl is acetyl or propionyl; and wherein said C<sub>1-4</sub> alkylsulfonyl is selected from the group consisting of: methanesulfonyl and ethanesulfonyl.
- The compound of claim 1, wherein Z is a  $C_{0-6}$  alkyl group optionally 55. substituted with an optionally substituted fused or unfused, aromatic or heterocyclic group.
- The compound of claim \$5, wherein said optionally substituted aromatic 56. group is substituted with a substituent selected from the group consisting of: benzene; naphthalene; dihydronaphthalene; and tetrahydronaphthalene; and wherein said optionally substituted heterocyclic group is selected from the group consisting of: a 5 to



6-membered saturated, partially saturated, or aromatic heterocyclic ring comprising 1 to 4 heteroatoms selected from nitrogen, oxygen and sulfur.

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- 57. The compound of claim 56, wherein said heterocyclic group is selected from the group consisting of: pyridine, quinoline, isoquinoline, imidazole, benzimidazole, azabenzimidazole, benzotriazole, furan, benzofuran, thiazole, benzothiazole, oxazole, benzoxazole, pyrrole, indole, indoline, indazole, pyrrolidine, pyrrolidone, pyrroline, piperazine, tetrahydroquinoline, tetrahydroisoquinoline, pyrazole, thiophene, isoxazole, isothiazole, triazole, tetrazole, oxadiazole, thiadiazole, morpholine, thiamorpholine, pyrazolidine, imidazolidine, imidazoline, tetrahydropyran, dihydropyran, benzopyran, dioxane, dithiane, tetrahydrofuran, tetrahydrothiophene, dihydrofuran, and dihydrothiophene.
- 58. The compound of claim 57, wherein said heterocyclic group comprise nitrogen or sulfur heteroatoms; and wherein said nitrogen or sulfur heteroatoms optionally further comprise oxides.
- 59. The compound of any one of claims 55 to 58, wherein said optionally substituted aromatic or heterocyclic group is bound to the  $C_{0-6}$ alkyl group through a bond from any position on said fused ring, or said aromatic or said heterocyclic group to said  $C_{0-6}$ alkyl group.
- 60. The compound of claim 59, wherein said bond is between said aromatic group or said heterocyclic group and said W group, and wherein said bond is a chemical bond to a carbon or nitrogen position, or a bond between an alkyl group to a carbon or nitrogen position, or a bond between an alkyl group to a nitrogen, oxygen or sulfur of an amino, hydroxyl or thiol substituent.
- 61. The compound of claim 55, wherein said optionally substituted fused or unfused aromatic or heterocyclic ring is substituted with one or more further substituents independently selected from the group consisting of: halogen; nitro; cyano; carboxylic

acid; an optionally substituted alkyl, alkenyl or cycloalkyl group; an optionally substituted hydroxyl group; an optionally substituted thiol group; an optionally substituted carboxylate, carboxamide or sulfonamide group; and an optionally substituted aromatic or heterocyclic group.

- 62. The compound of claim 61, wherein said optionally substituted fused or unfused aromatic or heterocyclic ring is optionally substituted with one or more further substituents independently selected from the group consisting of: nitro, cyano, hydroxy group, thiol group, amino group, carboxyl group, carboxylate group, sulfonate group, sulfonate group, sulfonamide group, carboxamide group, an optionally halogenated C<sub>1-4</sub> alkoxy, C<sub>2-4</sub> alkanoyl or aroyl, a C<sub>1-4</sub> alkylsulfonyl, an optionally substituted aryl or heterocyclic group.
- 63. The compound of claim 62, wherein the number of said further substituents on said fused or unfused aromatic or heterocyclic ring is 1 to 3.
- 64. The compound of claim 61, claim 62, or claim 63, wherein said halogen is selected from the group consisting of: fluorine; chlorine; bromine; and iodine; wherein said optionally halogenated C<sub>1-4</sub> alkyl is selected from the group consisting of: trifluoromethyl; methyl; and ethyl; wherein said optionally halogenated C<sub>1-4</sub> alkoxy selected from the group consisting of: methoxy; ethoxy; trifluoromethoxy; and trifluoroethoxy; wherein said C<sub>2-4</sub> alkanoyl is acetyl or propionyl; and wherein said C<sub>1-4</sub> alkylsulfonyl is selected from the group consisting of: methanesulfonyl and ethanesulfonyl.
- 65. The compound of claim 1, wherein Z is an optionally substituted  $C_{0-6}$ alkyl or  $C_{3-7}$  cycloalkyl amino group.
- 66. The compound of claim 65, wherein said optionally substituted  $C_{0-6}$ alkyl amino group is substituted with a substituent selected from the group consisting of: straight or branched chains.

- 67. The compound of claim 66, wherein said substituent is selected from the group consisting of: methylamino, ethylamino, propylamino, isopropylamino, butylamino, and isobutylamino.
- 68. The compound of claim 65, wherein said optionally substituted C<sub>3</sub>.

  7cycloalkyl amino group is selected from the group consisting of: cyclopropylamino, cyclopentylamino, and cyclohexylamino.
- 69. The compound of claim 68, wherein said  $C_{3-7}$  cycloalkyl amino group is substituted with an optionally substituted  $C_{1-6}$  alkyl group, or a  $C_{0-6}$  alkyl group substituted with an optionally substituted, fused or unfused aromatic group or heterocyclic group.
- 70. The compound of claim 69, wherein said optionally substituted, fused or unfused aromatic group or heterocyclic group is substituted with one or more further substituents independently selected from the group consisting of: halogen; nitro; cyano; carboxylic acid; an optionally substituted alkyl, alkenyl or cycloalkyl group; an optionally substituted thiol group; an optionally substituted thiol group; an optionally substituted carboxylate, carboxamide or sulfonamide group; and an optionally substituted aromatic or heterocyclic group.
- 71. The compound of claim 70, wherein said optionally substituted fused or unfused aromatic or heterocyclic group is optionally substituted with one or more further substituents independently selected from the group consisting of: nitro, cyano, hydroxy group, thiol group, amino group, carboxyl group, carboxylate group, sulfonate group, sulfonate group, sulfonamide group, carboxamide group, an optionally halogenated C<sub>1-4</sub> alkoxy, C<sub>2-4</sub> alkanoyl or aroyl, a C<sub>1-4</sub> alkylsulfonyl, an optionally substituted aryl or heterocyclic group.
- 72. The compound of claim 71, wherein the number of said further substituents on said fused or unfused aromatic or heterocyclic groups is 1 to 3.

- 73. The compound of claim 70, claim 71, or claim 72, wherein said halogen is selected from the group consisting of: fluorine; chlorine; bromine; and iodine; wherein said optionally halogenated  $C_{1-4}$  alkyl is selected from the group consisting of: trifluoromethyl; methyl; and ethyl; wherein said optionally halogenated  $C_{1-4}$  alkoxy selected from the group consisting of: methoxy; ethoxy; trifluoromethoxy; and trifluoroethoxy; wherein said  $C_{2-4}$  alkanoyl is acetyl or propionyl; and wherein said  $C_{1-4}$  alkylsulfonyl is selected from the group consisting of: methanesulfonyl and ethanesulfonyl.
- 74. The compound of any one of claim 65 to 73, wherein said amino group is substituted with one or two further substituents forming a secondary or tertiary amine respectively; and wherein said further substituents are optionally identical to each other.
- 75. The compound of claim 74, wherein said amino group is a nitrogen atom present on a guanidine, a carbamate or a urea group.
- 76. The compound of claim 74, wherein said amino group is substituted with one or more further substituents independently selected from the group consisting of: halogen; nitro; cyano; carboxylic acid; an optionally substituted alkyl, alkenyl or cycloalkyl group; an optionally substituted hydroxyl group; an optionally substituted thiol group; an optionally substituted amino or acyl group; an optionally substituted carboxylate, carboxamide or sulfonamide group; and an optionally substituted aromatic or heterocyclic group.
- 77. The compound of claim 76, wherein said amino group is optionally substituted with one or more further substituents independently selected from the group consisting of: nitro, cyano, hydroxy group, thiol group, amino group, carboxyl group, carboxylate group, sulfonate group, sulfonamide group, carboxamide group, an optionally halogenated  $C_{1-4}$  alkoxy,  $C_{2-4}$  alkanoyl or aroyl, a  $C_{1-4}$  alkylsulfonyl, an optionally substituted aryl or heterocyclic group.

- 78. The compound of claim 77, wherein the number of said further substituents on said amino group is 1 to 3.
- 79. The compound of claim 76, claim 77, or claim 78, wherein said halogen is selected from the group consisting of: fluorine; chlorine; bromine; and iodine; wherein said optionally halogenated  $C_{1-4}$  alkyl is selected from the group consisting of: trifluoromethyl; methyl; and ethyl; wherein said optionally halogenated  $C_{1-4}$  alkoxy selected from the group consisting of: methoxy; trifluoromethoxy; and trifluoroethoxy; wherein said  $C_{2-4}$  alkanoyl is acetyl or propionyl; and wherein said  $C_{1-4}$  alkylsulfonyl is selected from the group consisting of: methanesulfonyl and ethanesulfonyl.
- 80. The compound of claim 1, wherein Z is an optionally substituted carbonyl or sulfonyl group.
- 81. The compound of claim 80, wherein said carbonyl or sulfonyl group is substituted with an optionally substituted straight, cyclic or branched alkyl group
- 82. The compound of claim 81, wherein said carbonyl or sulfonyl group is substituted with a substituted from the group consisting of: C<sub>1-7</sub>alkylgroup and an optionally substituted aromatic or heterocyclic carbonyl or sulfonyl group.
- 83. The compound of claim 82, wherein said  $C_{1-7}$ alkyl group is selected from the group consisting of: acetyl, propionyl, cyclopropanoyl, cyclobutanoyl, isopropanoyl, isobutanoyl, methanesulfonyl, and ethanesulfonyl; and wherein said an optionally substituted aromatic or heterocyclic carbonyl or sulfonyl group is selected from the group consisting of: benzoyl, pyridinecarbonyl, and benzenesulfonyl.
- 84. The compound of claim 82, wherein said aromatic or said heterocyclic group is substituted with one or more further substituents independently selected from the

group consisting of: halogen; nitro; cyano; carboxylic acid; an optionally substituted alkyl, alkenyl or cycloalkyl group; an optionally substituted hydroxyl group; an optionally substituted thiol group; an optionally substituted amino or acyl group; an optionally substituted carboxylate, carboxamide or sulfonamide group; and an optionally substituted aromatic or heterocyclic group.

- 85. The compound of claim 84, wherein said aromatic or said heterocyclic group is optionally substituted with one or more further substituents independently selected from the group consisting of: nitro, cyano, hydroxy group, thiol group, amino group, carboxyl group, carboxylate group, sulfonate group, sulfonamide group, carboxamide group, an optionally halogenated C<sub>1-4</sub> alkoxy, C<sub>2-4</sub> alkanoyl or aroyl, a C<sub>1-4</sub> alkylsulfonyl, an optionally substituted aryl or heterocyclic group.
- 86. The compound of claim 85, wherein the number of said further substituents on said said aromatic or said heterocyclic group is 1 to 3.
- 87. The compound of claim 84, claim 85, or claim 86, wherein said halogen is selected from the group consisting of: fluorine; chlorine; bromine; and iodine; wherein said optionally halogenated  $C_{1-4}$  alkyl is selected from the group consisting of: trifluoromethyl; methyl; and ethyl; wherein said optionally halogenated  $C_{1-4}$  alkoxy selected from the group consisting of: methoxy; trifluoromethoxy; and trifluoroethoxy; wherein said  $C_{2-4}$  alkanoyl is acetyl or propionyl; and wherein said  $C_{1-4}$  alkylsulfonyl is selected from the group consisting of: methanesulfonyl and ethanesulfonyl.
- 88. The compound of claim 82, wherein said substituted carbonyl or sulfonyl group is optionally substituted with a substituent comprising a C<sub>1-6</sub>alkyl aromatic or heterocyclic group.

- 89. The compound of claim 88, wherein said substituent is selected from the group consisting of: phenylacetyl, phenylpropanoyl, pyridineacetyl, pyridinepropanoyl, phenylmethanesulfonyl; and a carbonyl of an optionally substituted aminoacid derivative.
- 90. The compound of claim 89, wherein said carbonyl is a carbonyl group of a urea or carbamate, wherein said urea or said carbamate is optionally substituted with a  $C_{1-6}$ alkyl or with a  $C_{1-6}$ alkyl group that is optionally substituted with an aromatic or heterocyclic group, wherein said is substituent is bound through a nitrogen or oxygen, respectively.

A compound according to Formula I:

Y—W (CR<sup>1</sup>R<sup>2</sup>)<sub>n</sub>ArOR<sup>3</sup>R<sup>4</sup>N(R<sup>5</sup>)(CR<sup>6</sup>R<sup>7</sup>)<sub>n</sub>·R<sup>8</sup>
z

wherein, W, Y, n, n', Ar, R<sup>1</sup>-R<sup>3</sup> are defined as above; and

X and Z are independently selected from the group consisting of: H; optionally substituted  $C_{1-6}$ alkyl or  $C_{0-6}$ alkyl or  $C_{0-6}$ alkylheterocyclyl.

- 92. The compound of claim 91, wherein X and Z opitionally are bound to each other forming an optionally substituted 5-to-7-membered cyclic amine group or said groups X and Z are optionally fused to the group Ar.
- 93. The compound of claim 92, wherein said optionally substituted 5- to 7-membered cyclic amine group is selected from the group consisting of: tetrahydropyrrole, pyrrolidine, piperazine, homopiperazine, piperidine, morpholine, thiomorpholine, pyrrole, imidazole, and an optionally substituted pyran, thiopyran or cycloalkyl ring.

- 94. The compound of claim 91, wherein said C<sub>1-6</sub>alkyl is independently substituted with a substituent selected from the group consisting of: halogen; nitro; cyano; carboxylic acid; an optionally substituted alkyl, alkenyl or cycloalkyl group; an optionally substituted thiol group; an optionally substituted amino or acyl group; an optionally substituted carboxylate, carboxamide or sulfonamide group; and an optionally substituted aromatic or heterocyclic group.
- 95. The compound of claim 91, wherein said C<sub>0-6</sub>alkaryl is independently substituted with a substituent selected from the group consisting of: halogen; nitro; cyano; carboxylic acid; an optionally substituted alkyl, alkenyl or cycloalkyl group; an optionally substituted thiol group; an optionally substituted amino or acyl group; an optionally substituted carboxylate, carboxamide or sulfonamide group; and an optionally substituted aromatic or heterocyclic group.
- 96. The compound of claim 91, wherein said C<sub>0-6</sub>alkylheterocyclyl is independently substituted with a substituent selected from the group consisting of: halogen; nitro; cyano; carboxylic acid; an optionally substituted alkyl, alkenyl or cycloalkyl group; an optionally substituted hydroxyl group; an optionally substituted thiol group; an optionally substituted amino or acyl group; an optionally substituted carboxylate, carboxamide or sulfonamide group; and an optionally substituted aromatic or heterocyclic group.
  - 97. A compound selected from the group consisting of:
- (a) AMD7490, N-(2-pyridinylmethyl)-N'-(6,7,8,9-tetrahydro-5*H*-cyclohepta[*b*]pyridin-9-yl)-1,4-benzenedimethanamine,
- (b) AMD7491, N-(2-pyridinylmethyl)-N'-(5,6,7,8-tetrahydro-8-quinolinyl)-1,4-benzenedimethanamine;
- (c) AMD7492, N-(2-pyridinylmethyl)-N'-(6,7-dihydro-5*H*-cyclopenta[*b*]pyridin-7-yl)-1,4-benzenedimethanamine;
- (d) AMD8766, N-(2-pyridinylmethyl)-N'-(1,2,3,4-tetrahydro-1-naphthalenyl)-1,4-benzenedimethanamine;



- (e) AMD8789, N-(2-pyridinylmethyl)-N'-(1-naphthalenyl)-1,4-benzenedimethanamine;
- (f) AMD8776, N-(2-pyridinylmethyl)-N'-(8-quinolinyl)-1,4-benzenedimethanamine;
- (g) AMD8859, N-(2-pyridinylmethyl)-N'-[2-[(2-pyridinylmethyl)amino]ethyl]-N'-(1-methyl-1,2,3,4-tetrahydro-8-quinolinyl)-1,4-benzene dimethanamine;
- (h) AMD8867, N-(2-pyrikinylmethyl)-N'-[2-[(1*H*-imidazol-2-ylmethyl)amino]ethyl]-N'-(1-methyl-1,2,3,4-tetrahydro-8-quinolinyl)-1,4-benzene dimethanamine;
- (i) AMD8746, N-(2-pyridinylmethyl)-N'-(1,2,3,4-tetrahydro-8-quinolinyl)-1,4-benzenedimethanamine;
- (j) AMD8835, N-(2-pyridinylmethyl)-N'-[2-[(1*H*-imidazol-2-ylmethyl)amino]ethyl]-N'-(1,2,3,4-tetrahydro-1-naphthalenyl)-1,4-benzene dimethanamine;
- (k) AMD8833, N-(2-pyridinylmethyl)-N'-(2-phenyl-5,6,7,8-tetrahydro-8-quinolinyl)-1,4-benzenedimethanamine;
- (l) AMD8825, N,N'-bis(2-pyridinylmethyl)-N'-(2-phenyl-5,6,7,8-tetrahydro-8-quinolinyl)-1,4-benzenedimethanamine;
- (m) AMD8869, N-(2-pyridinylmethyl)-N'-(\$,6,7,8-tetrahydro-5-quinolinyl)-1,4-benzenedimethanamine;
- (n) AMD8876, N-(2-pyridinylmethyl)-N'-(1*H*-imidazol-2-ylmethyl)-N'-(5,6,7,8-tetrahydro-5-quinolinyl)-1,4-benzenedimethanamine;
- (o) AMD8751, N-(2-pyridinylmethyl)-N'-(1*H*-imidazol-2-ylmethyl)-N'-(5,6,7,8-tetrahydro-8-quinolinyl)-1,4-benzenedimethanamine;
- (p) AMD8777, N-(2-pyridinylmethyl)-N'-[(2-amino-3\phenyl)propyl]-N'-(5,6,7,8-tetrahydro-8-quinolinyl)-1,4-benzenedimethanamine;
- (q) AMD8763, N-(2-pyridinylmethyl)-N'-(1*H*-imidazol-4-ylmethyl)-N'-(5,6,7,8-tetrahydro-8-quinolinyl)-1,4-benzenedimethanamine;
- (r) AMD8771, N-(2-pyridinylmethyl)-N'-(2-quinolinylmethyl)-N'-(5,6,7,8-tetrahydro-8-quinolinyl)-1,4-benzenedimethanamine;
- (s) AMD8778, N-(2-pyridinylmethyl)-N'-(2-(2-naphthoyl)aminoethyl)-N'-(5,6,7,8-tetrahydro-8-quinolinyl)-1,4-benzenedimethanamine;
- (t) AMD8781, N-(2-pyridinylmethyl)-N'-[(S)-(2-acetylamino-3-phenyl)propyl]-N'-(5,6,7,8-tetrahydro-8-quinolinyl)-1,4-benzenedimethanamine;

- (u) AMD8782, N-(2-pyridinylmethyl)-N'-[(S)-(2-acetylamino-3-phenyl)propyl]-N'-(5,6,7,8-tetrahydro-8-quinolinyl)-1,4-benzenedimethanamine;
- (v) AMD8788, N-(2-pyridinylmethyl)-N'-[3-((2-naphthalenylmethyl)amino)propyl]-N'-(5,6,7,8-tetrahydro-\(\delta\)-quinolinyl)-1,4-benzenedimethanamine;
- (w) AMD8733 and AMD8734, N-(2-pyridinylmethyl)-N'-[2-(S)-pyrollidinylmethyl]-N'-(5,6,7,8-tetrahydro-8-quinolinyl)-1,4-benzenedimethanamine;
- (x) AMD8756, N-(2-pyridinylmethyl)-N'-[2-(R)-pyrollidinylmethyl]-N'-(5,6,7,8-tetrahydro-8-quinolinyl)-1,4-benzenedimethanamine;
- (y) AMD8799, N-(2-pyridinylmethyl)-N'-[3-pyrazolylmethyl]-N'-(5,6,7,8-tetrahydro-8-quinolinyl)-1,4-benzenedimethanamine;
- (z) AMD8728, N-(2-pyridinylmethyl)-N'-[2-pyrrolylmethyl]-N'-(5,6,7,8-tetrahydro-8-quinolinyl)-1,4-benzenedimethanamine;
- (aa) AMD8836, N-(2-pyridinylmethyl) N'-[2-thiopheneylmethyl]-N'-(5,6,7,8-tetrahydro-8-quinolinyl)-1,4-benzenedinethanamine
- (bb) AMD8841, N-(2-pyridinylmethyl)-N'\[2-thiazolylmethyl]-N'-(5,6,7,8-tetrahydro-8-quinolinyl)-1,4-benzenedimethanamine;
- (cc) AMD8821, N-(2-pyridinylmethyl)-N'-[2-furanylmethyl]-N'-(5,6,7,8-tetrahydro-8-quinolinyl)-1,4-benzenedimethanamine;
- (dd) AMD8742, N-(2-pyridinylmethyl)-N'-[2-[(phenylmethyl)amino]ethyl]-N'- (5,6,7,8-tetrahydro-8-quinolinyl)-1,4-benzenedimethanamine;
- (ee) AMD8743, N-(2-pyridinylmethyl)-N'-(2-aminoethyl)-N'-(5,6,7,8-tetrahydro-8-quinolinyl)-1,4-benzenedimethanamine;
- (ff) AMD8753, N-(2-pyridinylmethyl)-N'-3-pyrrolidinyl-N'-(5,6,7,8-tetrahydro-8-quinolinyl)-1,4-benzenedimethanamine
- (gg) AMD8754, N-(2-pyridinylmethyl)-N'-4-piperidinyl-N'-(\$,6,7,8-tetrahydro-8-quinolinyl)-1,4-benzenedimethanamine;
- (hh) AMD8784, N-(2-pyridinylmethyl)-N'-[2-[(phenyl)amino]ethyl]-N'-(5,6,7,8-tetrahydro-8-quinolinyl)-1,4-benzenedimethanamine;
- (ii) AMD8759, N-(2-pyridinylmethyl)-N'-(7-methoxy-1,2,3,4-tetrahydro\2-naphthalenyl)-1,4-benzenedimethanamine;

Sub)

- (jj) AMD8762, N-(2-pyridinylmethyl)-N'-(6-methoxy-1,2,3,4-tetrahydro-2-naphthalenyl)-1,4-benzenedimethanamine;
- (kk) AMD8770, N-(2-pyridinylmethyl)-N'-(1-methyl-1,2,3,4-tetrahydro-2-naphthalenyl)-1,4-benzenedimethanamine;
- (ll) AMD8790, N-(2-pyridinylmethyl)-N'-(7-methoxy-3,4-dihydronaphthalenyl)-1-(aminomethyl)-4-benzamide;
- (mm) AMD8805, N-(2-pxridinylmethyl)-N'-(6-methoxy-3,4-dihydronaphthalenyl)-1-(aminomethyl)-4-benzamide;

Sul

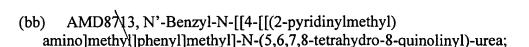
- (nn) AMD8902, N-(2-pyridinylmethyl)-N'-(1*H*-imidazol-2-ylmethyl)-N'-(7-methoxy-1,2,3,4-tetrahydro-2-naphthalenyl)-1,4-benzenedimethanamine;
- (oo) AMD8863, N-(2-pyridinylmethyl)-N'-(8-hydroxy-1,2,3,4-tetrahydro-2-naphthalenyl)-1,4-benzenedimethanamine;
- (pp) AMD8886, N-(2-pyridinylmethyl)-N'-(1*H*-imidazol-2-ylmethyl)-N'-(8-hydroxy-1,2,3,4-tetrahydro-2-naphthalenyl)-1,4-benzenedimethanamine;
- (qq) AMD8889, N-(2-pyridinylmethyl)-N'-(8-Fluoro-1,2,3,4-tetrahydro-2-naphthalenyl)-1,4-benzenedimethanamine;
- (rr) AMD8895, N-(2-pyridinylmethyl)-N'-(1*H*-midazol-2-ylmethyl)-N'-(8-Fluoro-1,2,3,4-tetrahydro-2-naphthalenyl)-1,4-benzenedimethanamine;
- (ss) AMD8852, N-(2-pyridinylmethyl)-N'-(5,6,7,8-tetrahydro-7-quinolinyl)-1,4-benzenedimethanamine;
- (tt) AMD8858, N-(2-pyridinylmethyl)-N'-(1H-imidazol-2-ylmethyl)-N'-(5,6,7,8-tetrahydro-7-quinolinyl)-1,4-benzenedimethanamine;
- (uu) AMD8785, N-(2-pyridinylmethyl)-N'-[2-[(2-naphthalenylmethyl) amino]ethyl]-N'-(5,6,7,8-tetrahydro-8-quinolinyl)-1,4-benzenedimethanamine;
- (vv) AMD8820, N-(2-pyridinylmethyl)-N'-[2-(isobutylamino)ethyl]-N'-(5,6,7,8-tetrahydro-8-quinolinyl)-1,4-benzenedimethanamine;
- (ww) AMD8827, N-(2-pyridinylmethyl)-N'-[2-[(2-pyridinylmethyl) amino]ethyl]-N'- (5,6,7,8-tetrahydro-8-quinolinyl)-1,4-benzenedimethanamine;
- (xx) AMD8828, N-(2-pyridinylmethyl)-N'-[2-[(2-furanylmethyl)amino]ethyl]-N'-(5,6,7,8-tetrahydro-8-quinolinyl)-1,4-benzenedimethanamine;

- (yy) AMD8772, N-(2-pyridinylmethyl)-N'-(2-guanidinoethyl)-N'-(5,6,7,8-tetrahydro-8-quinolinyl)-1,4-benzenedimethanamine; and
- (zz) AMD8861, N-(2-pyridinylmethyl)-N'-[2-[bis-[(2-methoxy)phenylmethyl]amino]ethyl]-N'-(5,6,7,8-tetrahydro-8-quinolinyl)-1,4-benzene dimethanamine.
  - 98. A compound selected from the group consisting of:
- (a) AMD8862, N-(2-pyridinylmethyl)-N'-[2-[(1*H*-imidazol-4-ylmethyl)amino]ethyl]-N'- (5,6,7,8-tetrahydro-8-quinolinyl)-1,4-benzene dimethanamine;
- (b) AMD8887, N-(2-pyridinyl)methyl)-N'-[2-[(1*H*-imidazol-2-ylmethyl)amino]ethyl]-N'-(5,6,7,8-tetrahydro-8-quinolinyl)-1,4-benzenedimethanamine;
- (c) AMD8816, N-(2-pyridinylmethyl)-N'-[2-(phenylureido)ethyl]-N'-(5,6,7,8-tetrahydro-8-quinolinyl)-1,4-banzenedimethanamine;
- (d) AMD8737, N-(2-pyridinylmethyl)-N'-[[N"-(n-butyl)carboxamido]methyl] -N'-(5,6,7,8-tetrahydro-8-quinolinyl)-l<sub>3</sub>4-benzenedimethanamine;
- (e) AMD8739, N-(2-pyridinylmethyl)-N'-(carboxamidomethyl)-N'-(5,6,7,8-tetrahydro-8-quinolinyl)-1,4-benzenedimethanamine;
- (f) AMD8752, N-(2-pyridinylmethyl)-N'-[(N''-phenyl)carboxamidomethyl]-N'-(5,6,7,8-tetrahydro-8-quinolinyl)-1,4-benzenedimethanamine;
- (g) AMD8765, N-(2-pyridinylmethyl)-N'-(carboxymethyl)-N'-(5,6,7,8-tetrahydro-8-quinolinyl)-1,4-benzenedimethanamine;
- (h) AMD8715, N-(2-pyridinylmethyl)-N'-(phenylmethyl)-N'-(5,6,7,8-tetrahydro-8-quinolinyl)-1,4-benzenedimethanamine;
- (i) AMD8907, N-(2-pyridinylmethyl)-N'-(1*H*-benzimidazol-2-ylmethyl)-N'-(5,6,7,8-tetrahydro-8-quinolinyl)-1,4-benzenedimethanamine;
- (j) AMD8927, N-(2-pyridinylmethyl)-N'-(5,6-dimethyl-1*H*-benzimidazol-2-ylmethyl)-N'-(5,6,7,8-tetrahydro-8-quinolinyl)-1,4-benzenedimethanamine (hydrobromide salt);
- (k) AMD8926, N-(2-pyridinylmethyl)-N'-(5-nitro-1*H*-benzimidazol-2-ylmethyl)-N'-(5,6,7,8-tetrahydro-8-quinolinyl)-1,4-benzenedimethanamine;
- (1) AMD8929, N-(2-pyridinylmethyl)-N'-[(1*H*)-5-azabenzimidazol-2-ylmethyl]-N'- (5,6,7,8-tetrahydro-8-quinolinyl)-1,4-benzenedimethanamine;





- (m)AMD8931, N-(2-pyridinylmethyl)-N-(4-phenyl-1*H*-imidazol-2-ylmethyl)-N'- (5,6,7,8-tetrahydro-8-quinolinyl)-1,4-benzenedimethanamine;
- (n) AMD8783,\N-(2-pyridinylmethyl)-N'-[2-(2-pyridinyl)ethyl]-N'-(5,6,7,8-tetrahydro-8-quinolinyl)-1,4-benzenedimethanamine;
- (o) AMD8764, N-(2-pyridinylmethyl)-N'-(2-benzoxazolyl)-N'-(5,6,7,8-tetrahydro-8-quinolinyl)-1,4-benzenedimethanamine;
- (p) AMD8780, N-(2\pyridinylmethyl)-N'-(trans-2-aminocyclohexyl)-N'-(5,6,7,8-tetrahydro-8-quin\linyl)-1,4-benzenedimethanamine;
- (q) AMD8818, N-(2-pyridinylmethyl)-N'-(2-phenylethyl)-N'-(5,6,7,8-tetrahydro-8-quinolinyl)-1,4-benzenedimethanamine;
- (r) AMD8829, N-(2-pyridinylmethyl)-N'-(3-phenylpropyl)-N'-(5,6,7,8-tetrahydro-8-quinolinyl)-1,4-benzenedimethanamine;
- (s) AMD8839, N-(2-pyridinylmethyl)-N'-(trans-2-aminocyclopentyl)-N'-(5,6,7,8-tetrahydro-8-quinolinyl)-1,4-benzenedimethanamine;
- (t) AMD8726, N-[[4-[[(2-pyridinylmethyl)amino]methyl]phenyl]methyl]-N-(5,6,7,8-tetrahydro-8-quinolinyl)-glycinamide;
- (u) AMD8738, N-[[4-[[(2-pyridinylmethyl)amino]methyl]phenyl]methyl]-N-(5,6,7,8-tetrahydro-8-quinolinyl)-(L)-alaninamide;
- (v) AMD8749, N-[[4-[[(2-pyridinylmethyl)amino]methyl]phenyl]methyl]-N-(5,6,7,8-tetrahydro-8-quinolinyl)-(L)-aspartamide)
- (w) AMD8750, N-[[4-[[(2-pyridinylmethyl)amino]methyl]phenyl]methyl]-N-(5,6,7,8-tetrahydro-8-quinolinyl)-pyrazinamide;
- (x) AMD8740, N-[[4-[[(2-pyridinylmethyl)amino]methyl]phenyl]methyl]-N-(5,6,7,8-tetrahydro-8-quinolinyl)-(L)-prolinamide;
- (y) AMD8741, N-[[4-[[(2-pyridinylmethyl)amino]methyl]phenyl]methyl]-N-(5,6,7,8-tetrahydro-8-quinolinyl)-(L)-lysinamide;
- (z) AMD8724, N-[[4-[[(2-pyridinylmethyl)amino]methyl]phenyl]methyl]-N-(5,6,7,8-tetrahydro-8-quinolinyl)-benzamide;
- (aa) AMD8725, N-[[4-[[(2-pyridinylmethyl)amino]methyl]phenyl]methyl]-N-(5,6,7,8-tetrahydro-8-quinolinyl)-picolinamide;



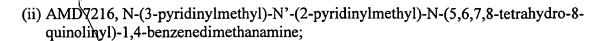
- (cc) AMD8712,\N'-phenyl-N-[[4-[[(2-pyridinylmethyl) amino]methyl]phenyl]methyl]-N-(5,6,7,8-tetrahydro-8-quinolinyl)-urea;
- (dd) AMD8716, N-(6,7,8,9-tetrahydro-5*H*-cyclohepta[*b*]pyridin-9-yl)-4-[[(2-pyridinylmethyl)amino]methyl]benzamide;
- (ee) AMD8717, N-(5,ò,7,8-tetrahydro-8-quinolinyl)-4-[[(2-pyridinylmethyl)amino]methyl]benzamide;
- (ff) AMD8634, N,N'-bis(2-pyridinylmethyl)-N'-(5,6,7,8-tetrahydro-8-quinolinyl)-1,4-benzenedimethanamine;
- (gg) AMD8774, N,N'-bis(2-pyridinylmethyl)-N'-(6,7,8,9-tetrahydro-5Hcyclohepta[b]pyridin-9-yl)-1,4-benzenedimethanamine;
- (hh) AMD8775, N,N'-bis(2-pyridinylmethyl)-N'-(6,7-dihydro-5*H*-cyclopenta[*b*]pyridin-7-yl)-1,4-benzenedimethanamine;
- (ii) AMD8819, N,N'-bis(2-pyridinylmethyl)-N'-(1,2,3,4-tetrahydro-1-naphthalenyl)-1,4-benzenedimethanamine;
- (jj) AMD8768, N,N'-bis(2-pyridinylmethyl)-N'-[(5,6,7,8-tetrahydro-8-quinolinyl)methyl]-1,4-benzenedimethanamine;
- (kk) AMD8767, N,N'-bis(2-pyridinylmethyl)-N'[(6,7-dihydro-5*H*-cyclopenta[*b*]pyridin-7-yl)methyl]-1,4-benzenedimethanamine;
- (ll) AMD8838, N-(2-pyridinylmethyl)-N-(2-methoxyethyl)-N'-(5,6,7,8-tetrahydro-8-quinolinyl)-1,4-benzenedimethanamine;
- (mm) AMD8871, N-(2-pyridinylmethyl)-N-[2-(4-methoxyphenyl)ethyl]-N'-(5,6,7,8-tetrahydro-8-quinolinyl)-1,4-benzenedimethanamine
- (nn) AMD8844, N,N'-bis(2-pyridinylmethyl)-1,4-(5,6,7,8-tetrahydro-8-quinolinyl)benzenedimethanamine;
- (oo) AMD7129, N-[(2,3-dimethoxyphenyl)methyl]-N'-(2-pyridinylmethyl)-N-(5,6,7,8-tetrahydro-8-quinolinyl)-1,4-benzenedimethanamine;
- (pp) AMD7130, N,N'-bis(2-pyridinylmethyl)-N-[1-(N"-phenyl-N"-methylureido)-4-piperidinyl]-1,3-benzenedimethanamine;



- (qq) AMD7131, N,N'-bis(2-pyridinylmethyl)-N-[N"-p-toluenesulfonylphenylalanyl)-4-piperidinyl]-1,3-benzenedimethanamine;
- (rr) AMD7136, N,N'-bis(2-pyridinylmethyl)-N-[1-[3-(2-chlorophenyl)-5-methyl-isoxazol-4-oyl]-4-pipekidinyl]-1,3-benzenedimethanamine;
- (ss)AMD7138, N\((2-hydroxyphenyl)methyl]-N'-(2-pyridinylmethyl)-N-(6,7,8,9-tetrahydro-5H-cyclohepta[b]pyridin-9-yl)-1,4-benzenedimethanamine;
- (tt) AMD7140, N-[(4\cyanophenyl)methyl]-N'-(2-pyridinylmethyl)-N-(6,7,8,9-tetrahydro-5H-cyclohepta[b]pyridin-9-yl)-1,4-benzenedimethanamine;
- (uu) AMD7141, N-[(4-cyanophenyl)methyl]-N'-(2-pyridinylmethyl)-N-(5,6,7,8-tetrahydro-8-quinolinyl)-1,4-benzenedimethanamine;
- (vv) AMD7142, N-[(4-acetamidophenyl)methyl]-N'-(2-pyridinylmethyl)-N-(5,6,7,8-tetrahydro-8-quinolinyl)-1,4-benzenedimethanamine;
- (ww) AMD7145, N-[(4-phenoxyphenyl)methyl]-N'-(2-pyridinylmethyl)-N-(6,7,8,9-tetrahydro-5H-cyclohepta[b]pyridin-9-yl)-1,4-benzenedimethanamine;
- (xx) AMD7147, N-[(1-methyl-2-carboxamido)ethyl]-N,N'-bis(2-pyridinylmethyl)-1,3-benzenedimethanamine;
- (yy) AMD7151, N-[(4-benzyloxyphenyl)methyl]-N'-(2-pyridinylmethyl)-N-(6,7,8,9-tetrahydro-5H-cyclohepta[b]pyridin-9-yl)-1,4-benzenedimethanamine; and
- (zz) AMD7155, N-[(thiophene-2-yl)methyl]-N'-(2-pyridinylmethyl)-N-(6,7,8,9-tetrahydro-5H-cyclohepta[b]pyridin-9-yl)-1,4-benzenedimethanamine.
  - 99. A compound selected from the group consisting of:
- (a) AMD7156, N-[1-(benzyl)-3-pyrrolidinyl]-N,N'-bis(2-pyridinylmethyl)-1,3-benzenedimethanamine;
- (b) AMD7159, N-[[1-methyl-3-(pyrazol-3-yl)]propyl]-N,N'-bis(2-pyridinylmethyl)-1,3-benzenedimethanamine;
- (c) AMD7160, N-[1-(phenyl)ethyl]-N,N'-bis(2-pyridinylmethyl)-1,3-benzenedimethanamine;
- (d) AMD7164, N-[(3,4-methylenedioxyphenyl)methyl]-N-(2-pyridinylmethyl)-N-(6,7,8,9-tetrahydro-5H-cyclohepta[b]pyridin-9-yl)-1,4-benzenedimethanamine;

- (e) AMD7166, N-[1-benzyl-3-carboxymethyl-4-piperidinyl]-N,N'-bis(2-pyridinylmethyl)-1,3-benzenedimethanamine;
- (f) AMD7167, N-[(3,4-methylenedioxyphenyl)methyl]-N'-(2-pyridinylmethyl)-N-(5,6,7,8-tetrahydro-8-quinolinyl)-1,4-benzenedimethanamine;
- (g) AMD7168, N-(3-pyridinylmethyl)-N'-(2-pyridinylmethyl)-N-(6,7,8,9-tetrahydro-5H-cyclohepta[b]pyridin-9-yl)-1,4-benzenedimethanamine;
- (h) AMD7169, N-[[1-methyl-2-(2-tolyl)carboxamido]ethyl]- N,N'-bis(2-pyridinylmethyl)-1,3-benzenedimethanamine;
- (i) AMD7171, N-[(1,5-dimethyl-2-phenyl-3-pyrazolinone-4-yl)methyl]-N'-(2-pyridinylmethyl)-N-(5,6,7,8-tetrahydro-8-quinolinyl)-1,4-benzenedimethanamine;
- (j) AMD7172, N-[(4-propoxyphenyl)methyl]-N'-(2-pyridinylmethyl)-N-(6,7,8,9-tetrahydro-5H-cyclohepta[\(\bar{b}\)]pyridin-9-yl)-1,4-benzenedimethanamine;
- (k) AMD7175, N-(1-phenyl-3,5\dimethylpyrazolin-4-ylmethyl)-N'-(2-pyridinylmethyl)-N-(5,6,7,8-tetrahydro-8-quinolinyl)-1,4-benzenedimethanamine;
- (l) AMD7177, N-[1*H*-imidazol-4-ylmethyl]-N,N'-bis(2-pyridinylmethyl)-1,3-benzenedimethanamine;
- (m) AMD7180, N-[(3-methoxy-4,5-methylenedioxyphenyl)methyl]-N'-(2-pyridinylmethyl)- N-(6,7,8,9-tetrahydro-5H-cyclohepta[b]pyridin-9-yl)-1,4-benzenedimethanamine;
- (n) AMD7182, N-[(3-cyanophenyl)methyl] N'-(2-pyridinylmethyl)-N-(6,7,8,9-tetrahydro-5H-cyclohepta[b]pyridin-9-yl)-1,4-benzenedimethanamine;
- (o) AMD7184, N-[(3-cyanophenyl)methyl]-N'\(2-pyridinylmethyl)-N-(5,6,7,8-tetrahydro-8-quinolinyl)-1,4-benzenedimethanamine;
- (p) AMD7185, N-(5-ethylthiophene-2-ylmethyl)-N-(2-pyridinylmethyl)-N-(6,7,8,9-tetrahydro-5H-cyclohepta[b]pyridin-9-yl)-1,4-benzenedimethanamine;
- (q) AMD7186, N-(5-ethylthiophene-2-ylmethyl)-N'-(2\pyridinylmethyl)-N-(5,6,7,8-tetrahydro-8-quinolinyl)-1,4-benzenedimethanamine
- (r) AMD7187, N-[(2,6-difluorophenyl)methyl]-N'-(2-pyridinylmethyl)-N-(6,7,8,9-tetrahydro-5H-cyclohepta[b]pyridin-9-yl)-1,4-benzenedimethanamine;
- (s) AMD7188, N-[(2,6-difluorophenyl)methyl]-N'-(2-pyridinylmethyl)-N-(5,6,7,8-tetrahydro-8-quinolinyl)-1,4-benzenedimethanamine;

- (t) AMD \$\frac{1}{189}, N-[(2-difluoromethoxyphenyl)methyl]-N'-(2-pyridinylmethyl)-N-(6,7,8,9\tetrahydro-5H-cyclohepta[b]pyridin-9-yl)-1,4-benzenedimethanamine;
- (u) AMD7195, N-(2-difluoromethoxyphenylmethyl)-N'-(2-pyridinylmethyl)-N-(5,6,7,8-tetrahydro-\(\bar{\gamma}\)-quinolinyl)-1,4-benzenedimethanamine;
- (v) AMD7196, N-(1,4-benzodioxan-6-ylmethyl)-N'-(2-pyridinylmethyl)-N-(6,7,8,9-tetrahydro-5H-cyclohepta[b]pyridin-9-yl)-1,4-benzenedimethanamine;
- (w) AMD7197, N, N -bis(2-pyridinylmethyl)-N-[1-(N"-phenyl-N"-methylureido)-4-piperidinyl]-1,4-benzenedimethanamine;
- (x) AMD7198, N, N'-bis (2-pyridinylmethyl)-N-[N"-p-toluenesulfonylphenylalanyl)-4-piperidinyl]-1,4-benzenedimethanamine;
- (y) AMD7199, N-[1-(3-pyridinecarboxamido)-4-piperidinyl]-N,N'-bis(2-pyridinylmethyl)-1,4-benzenedimethanamine;
- (z) AMD7200, N-[1-(cyclopropylcarboxamido)-4-piperidinyl]-N,N'-bis(2-pyridinylmethyl)-1,4-benzenedimethanamine;
- (aa) AMD7201, N-[1-(1-phenylcyclopropylcarboxamido)-4-piperidinyl]-N,N'-bis(2-pyridinylmethyl)-1,4-benzenedimethanamine.;
- (bb) AMD7202, N-(1,4-benzodioxan-6-ylmethyl)-N'-(2-pyridinylmethyl)-N-(5,6,7,8-tetrahydro-8-quinolinyl)-1,4-benzenedimethanamine;
- (cc) AMD7203, N-[1-[3-(2-chlorophenyl)-5-methyl-isoxazol-4-carboxamido]-4-piperidinyl]-N,N'-bis(2-pyridinylmethyl)-1,4-benzenedimethanamine;
- (dd) AMD7204, N-[1-(2-thiomethylpyridine-3-carboxamido)-4-piperidinyl]-N,N'bis(2-pyridinylmethyl)-1,4-benzenedimethanamine;
- (ee) AMD7207, N-[(2,4-difluorophenyl)methyl]-N'-(2-pyridinylmethyl)-N-(5,6,7,8-tetrahydro-8-quinolinyl)-1,4-benzenedimethanamine;
- (ff) AMD7208, N-(1-methylpyrrol-2-ylmethyl)-N'-(2-pyridinylmethyl)-N-(5,6,7,8-tetrahydro-8-quinolinyl)-1,4-benzenedimethanamine;
- (gg) AMD7209, N-[(2-hydroxyphenyl)methyl]-N'-(2-hyridinylmethyl)-N-(5,6,7,8-tetrahydro-8-quinolinyl)-1,4-benzenedimethanamine;
- (hh) AMD7212, N-[(3-methoxy-4,5-methylenedioxyphenyl)methyl]-N'-(2-pyridinylmethyl)-N-(5,6,7,8-tetrahydro-8-quinolinyl)-1,4-benzenedimethanamine;



- (jj) AMD7217, N-[2-(N"-morpholinomethyl)-1-cyclopentyl]-N,N'-bis(2-pyridinylmethyl)-1,4-benzenedimethanamine;
- (kk) AMD7220, N-[(1-methyl-3-piperidinyl)propyl]-N,N'-bis(2-pyridinylmethyl)-1,4-benzenedimethanamine;

(II) AMD7222, N-(1-methylbenzimidazol-2-ylmethyl)-N'-(2-pyridinylmethyl)-N-(5,6,7,8-tetrahydro-8-quinolinyl)-1,4-benzenedimethanamine;

- (mm) AMD7223, N-[1-(benzyl)-3-pyrrolidinyl]-N,N'-bis(2-pyridinylmethyl)-1,4-benzenedimethanamine;
- (nn) AMD7228, N-[[(1-phenyl-3-(N''-morpholino)]propyl]-N,N'-bis(2-pyridinylmethyl)-1,4-benzenedimethanamine;
- (oo) AMD7229, N-[1-(iso-propyl)-4-piperidinyl]-N,N'-bis(2-pyridinylmethyl)-1,4-benzenedimethanamine;
- (pp) AMD7230, N-[1-(ethoxycarbonyl)-4-piperidinyl]-N'-(2-pyridinylmethyl)-N-(5,6,7,8-tetrahydro-8-quinolinyl)-1,4-benzenedimethanamine;
- (qq) AMD7231, N-[(1-methyl-3-pyrazolyl)propyl]-N'-(2-pyridinylmethyl)-N-(5,6,7,8-tetrahydro-8-quinolinyl)-1,4-benzenedimethanamine;
- (rr) AMD7235, N-[1-methyl-2-(N'',N''-diethylcarboxamido)ethyl]-N,N'-bis(2-pyridinylmethyl)-1,4-benzenedimethanamine;
- (ss)AMD7236, N-[(1-methyl-2-phenylsulfonyl)ethyl]-N'-(2-pyridinylmethyl)-N-(5,6,7,8-tetrahydro-8-quinolinyl)-1,4-benzenedimethanamine;
- (tt) AMD7238, N-[(2-chloro-4,5-methylenedioxyphenyl)methyl]-N'-(2-pyridinylmethyl)-N-(5,6,7,8-tetrahydro-8-quinolinyl)-1,4-benzenedimethanamine;
- (uu) AMD7239, N-[1-methyl-2-[N"-(4-chlorophenyl)carboxamido]ethyl]-N'-(2-pyridinylmethyl)-N-(5,6,7,8-tetrahydro-8-quinolinyl)-1,4-benzenedimethanamine;
- (vv) AMD7241, N-(1-acetoxyindol-3-ylmethyl)-N'-(2-pyridinylmethyl)-N-(6,7,8,9-tetrahydro-5H-cyclohepta[b]pyridin-9-yl)-1,4-benzenedimethanamine;
- (ww) AMD7242, N-[(3-benzyloxy-4-methoxyphenyl)methyl]-N'-(2-pyridinylmethyl)-N-(6,7,8,9-tetrahydro-5H-cyclohepta[b]pyridin-9-yl)-1,4-benzenedimethanamine;



- (xx) AMD7244, N-(3-quinolylmethyl)-N'-(2-pyridinylmethyl)-N-(5,6,7,8-tetrahydro-8-quinolinyl)-1,4-benzenedimethanamine;
- (yy) AMD7245, N-[(8-hydroxy)-2-quinolylmethyl]-N'-(2-pyridinylmethyl)-N-(6,7,8,9-tetrahydro-5H-cyclohepta[b]pyridin-9-yl)-1,4-benzenedimethanamine; and
- (zz) AMD7247, N-(2\quinolylmethyl)-N'-(2-pyridinylmethyl)-N-(6,7,8,9-tetrahydro-5H-cyclohepta[b]pyri\din-9-yl)-1,4-benzenedimethanamine.

Sup

- 100. A compound selected from the group consisting of:
- (a) AMD7249, N-[(4-acetamidophenyl)methyl]-N'-(2-pyridinylmethyl)-N-(6,7,8,9-tetrahydro-5H-cyclohepta[b]pyridin-9-yl)-1,4-benzenedimethanamine;
- (b) AMD7250, N-[1H-imidazol-2-ylmethyl]-N,N'-bis(2-pyridinylmethyl)-1,4-benzenedimethanamine;
- (c) AMD7251, N-(3-quinolylmethyl)-N<sup>\*</sup>-(2-pyridinylmethyl)-N-(6,7,8,9-tetrahydro-5H-cyclohepta[b]pyridin-9-yl)-1,4-benzenedimethanamine;
- (d) AMD7252, N-(2-thiazolylmethyl)-N'-(2/pyridinylmethyl)-N-(6,7,8,9-tetrahydro-5H-cyclohepta[b]pyridin-9-yl)-1,4-benzenedimethanamine;
- (e) AMD7253, N-(4-pyridinylmethyl)-N'-(2-pyridinylmethyl)-N-(6,7,8,9-tetrahydro-5H-cyclohepta[b]pyridin-9-yl)-1,4-benzenedimethanamine;
- (f) AMD7254, N-[(5-benzyloxy)benzo[b]pyrrol-3-ylmethyl]-N,N'-bis(2-pyridinylmethyl)-1,4-benzenedimethanamine;
- (g) AMD7256, N-(1-methylpyrazol-2-ylmethyl)-N'-(2\pyridinylmethyl)-N-(6,7,8,9-tetrahydro-5H-cyclohepta[b]pyridin-9-yl)-1,4-benzenedimethanamine;
- (h) AMD7257, N-[(4-methyl)-1H-imidazol-5-ylmethyl]-N,N'-bis(2-pyridinylmethyl)-1,4-benzenedimethanamine;
- (i) AMD7259, N-[[(4-dimethylamino)-1-napthalenyl]methyl]-N,N'-bis(2-pyridinylmethyl)-1,4-benzenedimethanamine;
- (j) AMD7260, N-[1,5-dimethyl-2-phenyl-3-pyrazolinone-4-ylmethyl]- N,N'-bis(2-pyridinylmethyl)-1,4-benzenedimethanamine;
- (k) AMD7261, N-[1-[(1-acetyl-2-(R)-prolinyl]-4-piperidinyl]-N-[2-(2-pyridinyl)ethyl]-N'-(2-pyridinylmethyl)-1,3-benzenedimethanamine;



- (l) AMD 7262, N-[1-[2-acetamidobenzoyl-4-piperidinyl]-4-piperidinyl]-N-[2-(2-pyridinyl)ethyl]-N'-(2-pyridinylmethyl)-1,3-benzenedimethanamine;
- (m)AMD7270, N-[(2-cyano-2-phenyl)ethyl]-N'-(2-pyridinylmethyl)-N-(6,7,8,9-tetrahydro-5\(\frac{1}{4}\)-cyclohepta[b]pyridin-9-yl)-1,4-benzenedimethanamine;
- (n) AMD7272, N-[(N"-acetyltryptophanyl)-4-piperidinyl]-N-[2-(2-pyridinyl)ethyl]-N'-(2-pyridinylmethyl)-1,3-benzenedimethanamine;
- (o) AMD7273, N-[(N"-benzoylvalinyl)-4-piperidinyl]-N-[2-(2-pyridinyl)ethyl]-N'-(2-pyridinylmethyl)-1,3-benzenedimethanamine;
- (p) AMD7274, N-[(4-dimethylaminophenyl)methyl]-N'-(2-pyridinylmethyl)-N-(6,7,8,9-tetrahydro-5H-cyclohepta[b]pyridin-9-yl)-1,4-benzenedimethanamine;
- (q) AMD7275, N-(4-pyridinylmethyl)-N'-(2-pyridinylmethyl)-N-(5,6,7,8-tetrahydro-8-quinolinyl)-1,4-benzenedimethanamine;
- (r) AMD7276, N-(1-methylbenzimadazol-2-ylmethyl)-N'-(2-pyridinylmethyl)-N-(6,7,8,9-tetrahydro-5H-cyclohepta[b]pyridin-9-yl)-1,4-benzenedimethanamine;
- (s) AMD7277, N-[1-butyl-4-piperidinyl]-N-[\(\hat{2}\)-(2-pyridinyl)ethyl]-N'-(2-pyridinylmethyl)-1,3-benzenedimethanamine;
- (t) AMD7278, N-[1-benzoyl-4-piperidinyl]-N-[2-(2-pyridinyl)ethyl]-N'-(2-pyridinylmethyl)-1,3-benzenedimethanamine;
- (u) AMD7290, N-[1-(benzyl)-3-pyrrolidinyl]-N-[2-(2-pyridinyl)ethyl]-N'-(2-pyridinylmethyl)-1,3-benzenedimethanamine;
- (v) AMD7309, N-[(1-methyl)benzo[b]pyrrol-3-ylmethyl]-N-[2-(2-pyridinyl)ethyl]-N'-(2-pyridinylmethyl)-1,3-benzenedimethanamine;
- (w) AMD7311, N-[1H-imidazol-4-ylmethyl]-N-[2-(2-pyridinyl)ethyl]-N'-(2-pyridinylmethyl)-1,3-benzenedimethanamine;
- (x) AMD7359, N-[1-(benzyl)-4-piperidinyl]-N-[2-(2-pyridinyl)ethyl]-N'-(2-pyridinylmethyl)-1,4-benzenedimethanamine;
- (y) AMD7374, N-[1-methylbenzimidazol-2-ylmethyl]-N-[2-(2-pyridinyl)ethyl]-N'-(2-pyridinylmethyl)-1,4-benzenedimethanamine;
- (z) AMD7379, N-[(2-phenyl)benzo[b]pyrrol-3-ylmethyl]-N-[2-(2-pyridinyl)ethyl]-N'-(2-pyridinylmethyl)-1,4-benzenedimethanamine;



- (aa) AMD9025, N-[(6-methylpyridin-2-yl)methyl]-N'-(2-pyridinylmethyl)-N-(5,6,7,8-tetrahydro-8-quinolinyl)-1,4-benzenedimethanamine;
- (bb) AMD9031, N-(3-methyl-1H-pyrazol-5-ylmethyl)-N'-(2-pyridinylmethyl)-N-(5,6,7,8-tetrahydro-8-quinolinyl)-1,3-benzenedimethanamine;
- (cc) AMD9032, N\((2-methoxyphenyl)methyl]-N'-(2-pyridinylmethyl)-N-(5,6,7,8-tetrahydro-8-quinolinyl)-1,3-benzenedimethanamine;
- (dd) AMD9039, N-[(2-ethoxyphenyl)methyl]-N'-(2-pyridinylmethyl)-N-(6,7,8,9-tetrahydro-5H-cyclohepta[b]pyridin-9-yl)-1,3-benzenedimethanamine;
- (ee) AMD9045, N-(benzyloxyethyl)-N'-(2-pyridinylmethyl)-N-(5,6,7,8-tetrahydro-8-quinolinyl)-1,3-benzenedimethanamine;
- (ff) AMD9052, N-[(2-ethoxy-1-naphthalenyl)methyl]-N'-(2-pyridinylmethyl)-N-(5,6,7,8-tetrahydro-8-quinolinyl)-1,3-benzenedimethanamine; and
- (gg) AMD9053, N-[(6-methylpyridin-\(\frac{1}{2}\)-yl)methyl]-N'-(2-pyridinylmethyl)-N-(5,6,7,8-tetrahydro-8-quinolinyl)-1,3-benzened\(\frac{1}{2}\)methylmethanamine.
  - 101. A compound selected from the group consisting of:
- (a) AMD7074, 1-[[4-[[(2-pyridinylmethyl)amino]methyl] phenyl]methyl]guanidine;
- (b) AMD7076, N-(2-pyridinylmethyl)-N-(8-methyl-8-azabicyclo[3.2.1]octan-3-yl)-1,4-benzenedimethanamine;
- (c) AMD7078, 1-[[4-[[(2-pyridinylmethyl)amino]methyl]phenyl] methyl]homopiperazine;
- (d) AMD7079, 1-[[3-[[(2-pyridinylmethyl)amino]methyl]phenyl] methyl]homopiperazine;
- (e) AMD7103 and 7104, trans and cis-1-[[4-[[(2-pyridinylmethyl)amino]methyl]phenyl]methyl]-3,5-piperidinediamine;
- (f) AMD3597, N,N'-[1,4-Phenylenebis(methylene)]bis-4-(2-pyrimidyl) piperazine;
- (g) AMD3602, 1-[[4-[[(2-pyridinylmethyl)amino]methyl]phenyl]methyl]-1-(2 pyridinyl)methylamine;
- (h) AMD3667, 2-(2-pyridinyl)-5-[[(2-pyridinylmethyl)amino]methyl]-1,2,3,4-tetrahydroisoquinoline;



- (i) AMD7428 1-[[4-[[(2-pyridinylmethyl)amino]methyl]phenyl]methyl]-3,4diaminopyrrolidine;
- (j) AMD7485, 1-[[4-[[(2-pyridinylmethyl)amino]methyl]phenyl]methyl]-3,4diacetylaminopyrrolidine;
- (k) AMD8665, 8-[[4-[[(2\pyridinylmethyl)amino]methyl]phenyl]methyl]-2,5,8-triaza-3oxabicyclo[4.3.0]nonane; and
- (1) AMD8773, 8-[[4-[[(2-pyridinylmethyl)amino]methyl]phenyl]methyl]-2,5,8triazabicyclo[4.3.0]nonane
- 102. A pharmaceutical composition comprising a therapeutically effective amount of the compound of any one of claims 1-101; wherein said composition further comprises any pharmaceutically acceptable acid addition salts thereof and any stereoisomeric forms and mixtures of stereoisomeric forms thereof.
- A method of using the pharmaceutical composition of claim 102 for the 103. treatment of disease in a human or animal subject, comprising administering a pharmaceutical composition comprising a therapeutically effective dose of said pharmaceutical composition by a clinically acceptable route of administration according to a clinically effective regime.
- The method of claim 103, wherein said disease is selected from the group 104. consisting of: diseases mediated or resulting from chemokine receptor mediated diseases.
- 105. The method of claim 104, wherein said disease is a disease involving angiogenesis or tumorigenesis.
- 106. The method of claim 105, wherein said tumorigenesis comprises tumors of: brain; breast; prostate; lung and haematopoetic tissues.





- 107. The method of claim 103, said pharmaceutical composition modulates activity of a chemokine receptor; and wherein said method is useful for the treatment or prevention of a disease.
- The method of claims 103 to 107, wherein said disease is mediated or 108. resulting from an immunological response and is selected from the group consisting of: asthma, allergic rhinitis, hypersensitivity lung diseases, hypersensitivity pneumonitis, eosinophilic pneumonias, delayed-type hypersensitivity, interstitial lung disease (ILD), idiopathic pulmonary fibrosis, ILD associated with rheumatoid arthritis, systemic lupus erythematosus, ankylosing spondylitis, systemiosclerosis, Sjogren's syndrome, polymyositis or dermatomyositis); systemic anaphylaxis or hypersensitivity responses, drug allergies, insect sting allergies; autoimmune diseases, such as rheumatoid arthritis, psoriatic arthritis, systemic lupus erythematosus, myastenia gravis, juvenile onset diabetes; glomerulonephritis, autoimmune throiditis, graft rejection, including allograft rejection or graft-versus-host disease; inflammatory bowel diseases, such as Crohn's disease and ulcerative colitis; sportdy/oarthropathies; scleroderma; psoriasis (including Tcell mediated psoriasis) and inflammatory dermatoses such as dermatitis, eczema, atopic dermatitis, allergic contact dermatitis, urticaria; vasculitis (e.g., necrotizing, cutaneous, and hypersensitivity vasculitis); eosinphilià myotis, eosiniphilic fasciitis; and cancers.
- 109. A method to effect the binding of a chemokine receptor, comprising administering to a mammalian subject an effective amount of the pharmaceutical composition of claim 102.
- 110. A method to effect the binding of a chemokine receptor selected from the group consisting of: CCR-1, CCR-2, CCR-3, CCR-4, CCR-5, CXCR-3, and CXCR-4, comprising administering to a mammalian subject an effective amount of the pharmaceutical composition of claim 102.
- 111. The method of claim 109, wherein said pharmaceutical composition activates or promotes chemokine receptor function.

- The method of claim 111, wherein said pharmaceutical composition is 112. used in the treatment of disease selected from the group consisting of: immunosuppression, including immunosuppression induced by chemotherapy, radiation therapy; disease relating to wound healing and burn treatment; therapy for autoimmune disease or other drug therapy (e.g., corticosteroid therapy) or combination of conventional drugs used in the treatment of autoimmune diseases and graft/transplantation rejection, which causes immunosuppression; immunosuppression due to congenital deficiency in receptor function or other causes; and infectious diseases, such as parasitic diseases, including but not limited to helminth infections, such as nematodes (round worms); Trichuriasis, Enterobiasis, Ascariasis, Hookworm, Strongyloidiasis, Trichinosis, filariasis; trematodes; visceral worms, visceral larva migtrans (e.g., Toxocara), eosinophilic gastroenteritis (e.g., Anisaki spp., Phocanema ssp.), cutaneous larva migrans (Ancylostona braziliense, Ancylostoma caninum); the malaria-causing protozoan Plasmodium vivax, Human cytomegalovirus, Herpesvirus saimiri, and Kaposi's sarcoma herpesvirus, also known as human herpesvirus 8, and poxvirus Moluscum contagiosum?
- 113. A method of use of the pharmaceutical composition of claim 102, in combination with one or more agents useful in the prevention or treatment of HIV, comprising administering to a mammalian subject a therapeutically effective amount of said composition.
- 114. The method of claim 113, wherein one or more agents are selected from the group consisting of: nucleotide reverse transcriptase inhibitor such as zidovudine, didanosine, lamivudine, zalcitabine, abacavir, stavudine, adefovir, adefovir dipivoxil, fozivudine todoxil; non-nucleotide reverse transcriptase inhibitor (including an agent having anti-oxidation activity such as immunocal, oltipraz, etc.) such as nevirapine, delavirdine, efavirenz, loviride, immunocal, oltipraz, etc.; and protease inhibitors such as saquinavir, ritonavir, indinavir, nelfinavir, amprenavir, palinavir, lasinavir.

- 115. A pharmaceutical composition of claim 102, further comprising hydrates; solvates; any stereoisomeric forms and mixtures of stereoisomeric forms.
- 116. A method of use of the pharmaceutical composition of any one of claims 102 to 115, for the treatment or prevention of conditions which require chemokine receptor modulation; wherein said composition is formulated in a therapeutically effective dosage.
- 117. The method of claim 116, wherein said dosage is about 0.01 to 500 mg per kg patient body weight per day; and wherein said administration is in singe or multiple doses.
- 118. The method of claim 117, wherein said dosage is about 0.1 to about 250 mg/kg per day.